November, 2008: A Drop of News from the Waterborne Disease Surveillance Team at CDC

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Greetings

A Drop of News *is a forum for highlighting state and local waterborne disease surveillance activities, and giving informal updates from the Centers for Disease Control and Prevention (CDC) about waterborne disease and outbreak surveillance initiatives.*

With the rush of the summer months now over, *A Drop of News* now takes time to address a broader range of topics related to water and health. Begin by meeting DPD's new drinking water

epidemiologist and reading about the 100th anniversary of drinking water chlorination in the United States. Continue to page 3 to learn about collaborative drinking water activities and an upcoming EPA meeting. Page 4 provides an interesting update about the CSTE-initiated workgroup on *Naegleria fowleri*, as well as a new web resource for investigating unexplained respiratory disease outbreaks, which are sometimes caused by waterborne agents.

A Healthy Water web site update is included on page 5. An exciting new program about laboratory testing proficiency for *Legionella* follows on page 6. Revisit the summer on page 7 with New Mexico's efforts to curb a cryptosporidiosis outbreak and better understand swimmer behaviors. Page 8 contains resources for public inquiries, as well as a timeline for launching the National Outbreak Reporting System (NORS). Finish by finding out more about the year-round Model Aquatic Health Code project on page 9 and efforts to address issues associated with a lack of water on page 10.

As in the past, we hope you will share this newsletter with other waterborne disease investigators, provide feedback and send in updates about your recent waterborne disease activities and accomplishments for inclusion in an upcoming newsletter.
We look forward to hearing from you via the email address evl1@cdc.gov !

Actions and Alerts

Please submit unreported waterborne disease outbreaks for 2007 and 2008 to Jonathan Yoder by email at jey9@cdc.gov or fax (770.488.7761) using the CDC 52.12 form, available online at http://www.cdc.gov/healthyswimming/downloads/cdc_5212_waterborne.pdf .

Pool inspection and spa inspection studies can increase awareness about the value of pool operation oversight. Health departments with electronic pool and spa inspection data from 2007 that would like to collaborate with CDC on a similar project should contact Michele Hlavsa by the end of December, 2008. Previous pool inspection study information is available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5222a1.htm. Previous spa inspection study information is available at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5325a2.htm

The last newsletter issue described the impact of good communication between community partners and public health officials in response to increases in cryptosporidiosis (June 2008, page 2). The CDC document called the Cryptosporidiosis Outbreak Response & Evaluation (CORE) that was referenced in the article is now posted online at http://www.cdc.gov/crypto/pdfs/core_guidelines.pdf. Email any comments or feedback about it to Michele Hlavsa at acz3@cdc.gov.

Mark your Calendars!

EPA Symposium on Groundwater-Borne Infectious Disease, Etiologic Agents and Indicators (see page 4): December 2-4

New Drinking Water Epidemiologist in DPD

Please welcome DPD's new domestic drinking water epidemiologist, Joan Brunkard! Joan has taken over for Sharon Roy, who will continue to work with the team in a new position focused on global drinking water and sanitation. Joan's background is in environmental science; she received her Bachelor of Science at the University of California, Berkeley in the Department of Environmental Science, Policy, and Management and her PhD from the Department of Environmental Studies at the University of California, Santa Cruz, where she conducted research on the seroprevalence and risk factors for dengue fever on the Texas-Mexico border. She served

as a CDC Epidemic Intelligence Service Officer in New Orleans, Louisiana following Hurricane Katrina where she worked with the State of Louisiana on a variety of public health and epidemiologic studies. Her main research interests include the ecology of infectious diseases, waterborne and mosquito-borne disease, climate change science and policy, and interactions between the environment, human behavior, and public health. Email: jbrunkard@cdc.gov Phone: 770.488.7711

Figure 1 Dr. Joan Brunkard during a recent visit to Dr. Vince Hill's laboratory. Source: James Gathany (CDC/CCHIS/NCHM)

100 Years of Drinking Water Chlorination

Did you know that this year marks the 100th anniversary of chlorinating our public drinking water supplies? On September 26, 1908, Jersey City in New Jersey became the first city in the United States to begin chlorinating its municipal drinking water supplies. Over the next decade, thousands of cities and towns across the United States started chlorinating their drinking water, and the health protection effect was enormous.

Just 100 years ago, waterborne diseases like cholera and typhoid fever were commonplace and life expectancy in the United States was only 47 years. Chlorinating our drinking water had a dramatic impact on reducing water-borne disease in the United States -- typhoid fever, for example, is 1000 times less common today than it was in the early 1900s.

Today we have one of the safest drinking water supplies in the world. However, despite huge progress, there are still drinking water- associated disease outbreaks in the United States each year, illustrating that we must not take clean drinking water for granted. One of our biggest challenges in continuing to provide safe drinking water is our aging drinking water infrastructure. We need to repair, maintain, and upgrade the treatment plants and pipes that our parents and grandparents built to provide us with a safe water supply. There are other things we can do to ensure that our drinking water is safe--preventing pollution of our rivers, lakes and aquifers; promoting water conservation; and enhancing drinking water regulations. Celebrate this important anniversary of public health by enjoying a glass of water, but remember – we still have work to do!

Drinking Water Advisories—A Toolkit for Success

Drinking water advisories (DWAs), such as boil water orders, are public announcements issued by local authorities to warn a community of a possible intentional or unintentional drinking water contamination and to advise how to avoid potential adverse health effects from the contamination. Failure to correctly understand and implement the actions recommended in a DWA can put community members at risk for illness and unnecessary fear and result in the population not being prepared if, and when, water service is interrupted. Efforts to successfully implement a DWA must address multiple challenges, including the need for a well-coordinated and rapidly

disseminated message that is clear, concise, and can be understood and followed easily by diverse audiences.

The CDC's National Center for Zoonotic, Vectorborne, and Enteric Diseases (NCZVED) and National Center for Environmental Health (NCEH) have teamed with the US Environmental Protection Agency (EPA), and the American Water Works Association (AWWA) to initiate a project to develop a DWA "tool kit" that can be used by state, local, tribal, and territorial public health and drinking water authorities who are responsible for issuing and implementing DWAs. The project's goal is to provide a practical "toolkit" based upon identified current best practices. The project will maintain the focus on community water systems and will ensure that a spectrum of situations that generate either local- or state-initiated DWAs are addressed.

The best practices "tool kit" is intended to provide direction and guidance on essential steps for all DWAs, including when to issue an advisory, how to identify target audiences, and how to overcome communications challenges related to dissemination, comprehension and implementation of a DWA's message. A variety of scenarios, including "Boil Water", "Do Not Drink", and "Do Not Use", will be considered in detail. Good communication among the water system(s), all appropriate public and environmental health authorities, and other relevant local and state agencies will be emphasized, as will the need for coordination with existing local, state, and national public notification frameworks, state and local public and environmental health regulations, and emergency command systems. Inquiries about this project may be directed to Mark Miller (CDC/NCEH) and Jay Watson (CDC/NCZVED).

Total Coliform Rule Revisions

The Total Coliform Rule (TCR) was passed in 1989 as part of the Safe Drinking Water Act to prevent water contamination and protect public health by regulating the frequency and reporting of microbial testing in the nation's public drinking water systems. The TCR is periodically reviewed by the Total Coliform Rule/Distribution System Advisory Committee (TCRDSAC), which includes members representing water utilities; state and federal drinking water regulators; public health; city, county, and tribal governments; and public interest groups. Recommendations for revisions are forwarded to the EPA in the form of an agreement in principle (AIP). The most recent AIP was signed on September 18, 2008. The proposed TCR revisions will improve public health protection by adopting a more proactive, "find and fix" approach, which requires public drinking water systems that exceed limits on total coliform and E. coli to conduct system assessments and correct any defects or problems that are identified. Other proposed changes include eliminating fecal coliforms as a microbial indicator and reducing the monitoring and reporting burden for compliant systems. To learn more about the TCR revisions, read the EPA press release at http://yosemite.epa.gov/opa/admpress.nsf/d0cf6618525a9efb85257359003fb69d/9a78b13b2821d1c0852574cf004d5bce!OpenDocument, which also provides a link to the AIP.

Upcoming EPA Symposium

EPA will host a symposium on groundwater-borne infectious disease, etiologic agents and indicators on December 2-4, 2008 at the Carnegie Institute of Washington in Washington, D.C. All are welcome to attend this public forum, which will have seating and Wi-Fi available for 400 people. For more information, including the current meeting agenda, please go to: http://es.epa.gov/ncer/events/#dec0208 or contact Philip Berger at Berger.Philip@epa.gov.

Naegleria fowleri—CSTE Workgroup Update

The national workgroup on *Naegleria fowleri*—established by the Council of State and Territorial Epidemiologists (CSTE)—continues to work towards meeting its objectives. The national database of primary amebic meningoencephalitis (PAM) cases in the United States has been completed and reviewed by state coordinators. This database will be a repository for both historical and future case data. A new reporting form has also been finalized and made available at: http://www.cdc.gov/ncidod/dpd/parasites/Naegleria/ . Two cases of PAM have been reported to CDC for 2008.

In June, a position statement at CSTE's 2008 annual conference recommended making *Naegleria fowleri*, *Balamuthia* and *Acanthamoeba* infections nationally notifiable conditions. Although the position statement did not pass, there was strong interest in pursuing the recommendations at a regional level by states that have reported multiple cases of PAM—including Florida, which is currently taking steps to make *N. fowleri*, *Balamuthia* and *Acanthamoeba* infections state-notifiable. In discussing *N. fowleri* infections and waterborne disease surveillance activities, Dr. Roberta Hammond, Florida's food and waterborne disease coordinator, observed that "It's a rare but nearly always fatal infection that infects young children, so it is important for us to know what its incidence and ecology are, in order to be able to effectively direct our prevention messages."

Morbidity and Mortality Weekly Report (MMWR)—Surveillance Report Updates

The MMWR Surveillance Summary reports for waterborne disease and outbreaks (2005-2006 data) were published on September 12, 2008. Access the reports at: http://www.cdc.gov/healthyswimming/surveillance.htm . The Waterborne Disease Surveillance Team thanks everyone who contributed to this project. We look forward to working with you and your colleagues on the next report, which will detail 2007-2008 data. In the meantime, be on the look-out for new cryptosporidiosis and giardiasis surveillance reports in 2009!

New Web Site for Unexplained Respiratory Disease Outbreaks

Acute respiratory disease outbreaks can pose a number of challenges to public health personnel. Among these challenges is how to determine the etiology of the outbreak, and how to proceed in the absence of even a suspected etiologic agent. Factors that may impede the process include lack of staff, lack of funding and the absence of adequate or existing diagnostic tests. CDC's Respiratory Outbreak Working Group, a multidisciplinary group of 40 respiratory disease experts from across three CDC Centers and numerous Divisions, launched a new web site in September 2008 about investigating unexplained respiratory illnesses outbreaks (URDO) with the goal of assisting public health staff who are responsible for outbreak response and control measures. The web site contains guidance and documents for conducting URDO investigations, generating differential diagnoses, collecting and handling specimens, performing diagnostic testing, implementing prevention and control measures and additional links to resources and references about acute respiratory illnesses.

The predominant clinical respiratory syndromes addressed by this website include: outbreaks of prolonged paroxysmal cough, bronchitis, pneumonia, influenza-like illness, and acute respiratory distress syndrome or rapidly progressive pneumonia. While water exposure may not be

implicated in the majority of URDO investigations, the web site may be of assistance to outbreak investigators who have not eliminated a respiratory pathogen as a potential source of illness (e.g., *Legionella*, certain chemical exposures) and may be a helpful resource to waterborne disease outbreak coordinators who get involved in other types of outbreak investigations. Access the URDO web site at: http://emergency.cdc.gov/urdo.

Coming Soon—The Healthy Water Web Site

The Healthy Water web site team has been working steadily towards meeting its Phase I goal of providing future users with a comprehensive source of water-related resources at CDC. Recent accomplishments include the addition of a new team member in the role of web developer, a poster presentation at a national meeting and the creation of the web site address and a 'healthy water' email account!

Web Developer Hired: Caryn Coln has joined the Healthy Water web site team to create content and graphics for Healthy Water web pages, as well as use existing information prepared by the rest of the team. Ms. Coln has a M.S. degree in Computer Information Systems from Nova Southeastern University in Fort Lauderdale, Florida. Before joining the Healthy Water team, she was a Senior Usability Analyst for the National Center for Environmental Health (NCEH) and the Coordinating Office for Terrorism Preparedness and Emergency Response (COTPER). Caryn resides in Atlanta with her husband and son.

Poster Presentation: The Healthy Water web site team presented a poster at the National Conference on Health Communication, Marketing and Media, held in Atlanta (August, 2008). Hilda Whitmire represented the team at the conference and presented the poster entitled, Healthy Water Website: Creating the New CDC Water Clearinghouse Website. The conference was sponsored by the CDC's National Center for Health Marketing and the Office of Enterprise Communications. The National Cancer Institute and the National Public Health Information Coalition were co-sponsors for the event. In addition to the methodology behind creating the web site, the poster also presented the logic model that is being used to drive the project, as well as the topic tree that illustrates the cross-agency collaboration on content for the website.

Official Addresses: The Healthy Water web site now has an official web address (http://www.cdc.gov/healthywater) and the web team is developing a water-specific image to display on the web site's individual pages. The Drinking Water section is the first section that will be completed, and the web site launch date is the end of December, 2008. Users may email healthywater@cdc.gov with questions about the project at any time and send feedback about the web site after it has launched.

Figure 2 Hilda Whitmire stands next to the Healthy Water poster that she presented at the National Conference on Health Communication, Marketing and Media.

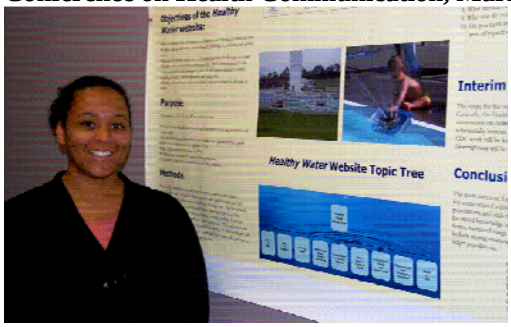

Figure 3 Screen shot of the Healthy Water main page

The Environmental Legionella Isolation Techniques Evaluation (ELITE) Program

When CDC provides support for legionellosis case and disease clusters, one of the questions that frequently arises from state coordinators is "What laboratory should we, and the general public, use for environmental testing?" This article summarizes information about a new program being coordinated by CDC's Legionella team to make it easier to identify a laboratory with a solid track record for isolating the bacteria. The unabridged article, which you may wish to make available to laboratories in your state, is available at: http://www.cdc.gov/legionella/elite-intro.htm#1

Legionella spp. can be difficult to isolate. Culture and enumeration of *Legionella* from environmental sources involves several detailed steps. The ELITE Program, which will be launched in April, 2009, was created as a way for laboratories to test their *Legionella* isolation techniques against standardized samples. The overall goal of the ELITE Program is to ensure that industry practices achieve the highest standards and reliability.

Any laboratory located in the United States or its territories that processes environmental samples for culture of *Legionella* is invited to join. This includes commercial laboratories of any size, state and local public health labs, or university laboratories. The program is free. However, laboratories must have internet access to participate in the ELITE Program.

Participating laboratories will receive a panel of 6 test samples biannually that may contain *Legionella* and other microorganisms commonly found in fresh water. The laboratories will be asked to process the samples according to their standard protocols and report the results on our electronic form; results will be scored as soon as they are submitted.

To receive a passing score, laboratories will need to successfully isolate *Legionella* from two consecutive test sample panels. These laboratories will receive a Certificate of Proficiency and be listed in the ELITE Members List on CDC's *Legionella* web site, which will be accessible to both public health professionals and the general public. The Certificate of Proficiency and ELITE Member listing will immediately be available once passing results are submitted.

ELITE Program administrators will work closely with labs that receive failing scores to improve their techniques. Failing two or more consecutive test panels may result in suspension of ELITE Member status but there is no other penalty for failing scores and there will never be a public list of failing labs.

Contact information for ELITE Members who receive Certificates of Proficiency will be posted on the ELITE Members List unless a laboratory declines to have this information posted. All other personal information will be kept strictly confidential. The ELITE website will post an aggregate report which anonymously combines data from all ELITE Program Participants. The website will also provide laboratories with individual reports containing their results and allowing them to see how they compare with other ELITE Program Members, though other ELITE Program Members will not be listed by name.

Additional information about policy guidelines, protocols, and the latest news on *Legionella* may be found at: http://www.cdc.gov/legionella

Laboratories that are interested in enrolling in the program may receive a Pre-Launch enrollment package by sending their contact information (name, address, email address) by mail, fax, or email to:

Mailing address:
ELITE Program
Centers for Disease Control and Prevention
1600 Clifton Rd NE
Mailstop G03
Atlanta, GA 30333

Fax number: (866) 638-0199
Email address: elite@cdc.gov

Figure 4 An electron micrograph of *Hartmannella vermiformis* and *Legionella pneumophila* (Source: Public Health Image Library (PHIL): http://phil.cdc.gov/phil/home.asp)

Outbreak Investigations—Cryptosporidiosis in New Mexico, 2008

Submitted by David Selvage, MHS PA-C, and Judy Espinoza, MPH, at the City of Albuquerque

In mid-August, 2008, the Albuquerque Environmental Health Department (AEHD) was notified of six children who became ill after swimming at the same aquatics facility and the New Mexico Department of Health (NMDOH), Infectious Disease Epidemiology Bureau (IDEB) was contacted. NMDOH identified two additional confirmed cases of cryptosporidiosis in swimmers. One, a 17-year old competitive swimmer who had used the pool since early July, swam while ill, and competed in a large, statewide swim meet at the pool at the end of July. Active surveillance by IDEB and City of Albuquerque identified several cases among competitive swimmers. By September 22, 2008, IDEB had identified 29 confirmed and 60 probable outbreak-related cases who had used pools in four counties. Specimens submitted to CDC for genotyping had an

identical genetic pattern of *Cryptosporidium hominis* and a water sample from the aquatic facility tested positive for *Cryptosporidium hominis*.

Outbreak investigation and control efforts were greatly improved by the ability of the stakeholders (i.e., epidemiologists, environmental health specialists, laboratorians, and health communications specialists) to work together as a team. In less than one week from when the City of Albuquerque received the initial call, the stakeholders had been contacted and IDEB had put a plan of action in place. IDEB coordinated communication and response between the City of Albuquerque, the New Mexico Environment Department's (NMED) Pool Program, the Bernalillo County Environment Department (BCED), Kirtland Air Force Base public health staff and the Parasitic Diseases Branch at CDC. IDEB, NMED and BCED worked closely together to issue a multiagency press release and a health alert network message. The aquatics facility's pools were hyperchlorinated, as were any additional pools associated with an infected swimmer. Between August 15th and September 22nd, NMED and the City of Albuquerque combined their resources to make sure that 25 pools and one water park were hyperchlorinated statewide. The City of Albuquerque implemented weekly hyperchlorination of all year-round city pools during the outbreak.

The 2008 outbreak is the first recreational water-associated outbreak of cryptosporidiosis on record in New Mexico. Of the 89 cases identified, 34% reported swimming while ill or during the 2 weeks after symptoms resolved. Among the recommendations developed by NMDOH, NMED and CDC after the outbreak were measures to educate pool operators about diarrheal illnesses and improve communications between public health agencies following the report of a single case of pool-associated cryptosporidiosis. A web-based survey was also created to investigate swimmer attitudes and perceptions surrounding swimming while ill. The survey was sent to swimmers in October. The results will be available in 2009 for use in the development of educational messages, primarily for competitive swimmers.

Figure 5 One of the posters used by New Mexico during the outbreak.

CDC Resources—Parasitic Disease and Healthy Swimming Public Inquiries

Public health practitioners in local and state health departments receive calls from the public about a large number of topics and concerns. Responding to these callers' needs requires quick thinking, excellent communication skills, and close attention to detail. The Parasitic Diseases Branch in CDC's Division of Parasitic Diseases manages public inquiries through two main routes:

The Parasitic Diseases Branch (PDB) Public Inquiries team, coordinated by Eva Nace, Health Scientist, receives phone calls and emails from the general public, physicians, medical support staff, researchers, students and the media about parasitic diseases. Inquiries cover a broad range of parasites, including those of both global and domestic concern. While public inquiries are not restricted to waterborne pathogens, questions about specific waterborne pathogens (e.g., *Giardia, Cryptosporidium*) and requests for assistance with outbreak response, laboratory testing and therapeutic treatment options are not uncommon. The Public Inquiries group provides direct assistance and triages complicated or urgent calls to subject matter experts Monday-Friday during regular business hours, excluding holidays. Please keep this resource in mind if you need assistance reaching someone in PDB or are referring health care professionals or the public for general parasitic disease questions. **Telephone** 770.488.7775 (staffed Monday-Friday) **Email** parasites@cdc.gov

The Healthy Swimming program in DPD is led by Michele Hlavsa, recreational water epidemiologist for DPD's Water and Environment Team. The Healthy Swimming program includes events such as Recreational Water Illness Prevention Week and collaborative projects with local, state and federal partners. An important component of the Healthy Swimming program is public awareness about health issues associated with recreational water activities. Questions from the public about healthy swimming may frequently be answered using resources available at http://www.cdc.gov/healthyswimming. Public inquiries about healthy swimming may be emailed to healthyswimming@cdc.gov.

Figure 6 Eva Nace

Figure 7 Michele Hlavsa

Looking Ahead—The National Outbreak Reporting System

The National Outbreak Reporting System (NORS) is on schedule to launch in January of 2009, pending completion of the final steps in CDC's mandatory clearance and security process in late 2008. All of the reporting components (foodborne, waterborne, animal contact and person-to-person transmission) will be available at launch. The CDC will also 1) set up permissions models and user accounts within NORS for each site, 2) request a signed 'Rules of Behavior' document for users who have not yet submitted one, and 3) post the electronic versions of the NORS CDC 52.12 and 52.13 forms online for use by health departments and staff who will not be entering reports directly into NORS. The current timeline for launching NORS is as follows:

- Training and development of permissions models for all reporting sites—completed
- Identification of initial NORS users—completed
- Development of training videos (Flash files compatible with PC and Mac systems) for all data entry sections in NORS—in process, to be finalized after NORS receives clearance
- Distribution of NORS Rules of Behavior document for initial users to sign and return—November/December, 2008
- Permissions model and initial user account set-up (additional user accounts may be set-up on an ongoing basis following system deployment)—December, 2008
- Migration of waterborne disease outbreak data to NORS—December, 2008
- Release of training videos and training support information to Reporting Site Administrators—December, 2008/January, 2009
- Deployment of NORS for use by all reporting sites—January, 2009
- Training Q&A sessions—January/February, 2009
- Availability of waterborne disease outbreak data in NORS (following verification of migrated data and manual entry of variables that could not be migrated) —spring, 2009

Training support will be ongoing. Training materials will be updated as new features are made available in NORS. If Reporting Site Administrators at your site would like assistance or additional resources for training, please do not hesitate to contact the NORS Team at NORSadmin@cdc.gov.

The Model Aquatic Health Code

The United States has no federal regulatory authority or uniform national standards governing design, construction, operation, and maintenance of treated recreational venues. Stemming from a CDC-sponsored workshop in February, 2005, the Model Aquatic Health Code (MAHC) project was initiated in 2007 to develop a scientifically based model code that would be national in scope, data driven, user-friendly, frequently updated, and created with input from all sectors and levels of public health, all segments of the aquatics industry, and the general public. The MAHC is intended to make the best available standards and practices accessible as a model and guide for local and state agencies needing assistance to update or implement their own codes, with initial efforts being focused on reducing the spread of recreational water illnesses at treated swimming venues.

A grant from the National Swimming Pool Foundation enabled the start of the MAHC project. Recent accomplishments include the MAHC "Strawman"-- an overall outline of the envisioned MAHC—as well as four draft modules and an annex. The first three modules cover the Preface, User Guide, and Definitions chapters of the MAHC. The fourth module, Fecal/Vomit/Blood Contamination Response, is followed by the Annex, which summarizing the module's rationale. Each module was developed by volunteer experts from state and local health departments, aquatic facility operators and designers, and academia under the sponsorship of the CDC. Future modules from existing technical committees will include: design and construction (e.g. recirculation systems and filtration, ventilation and air quality); operation and maintenance (e.g. disinfection and water quality, monitoring and testing); and policies and management (e.g. contamination burden (bather load), operator training,). Draft versions of the modules will be posted online as they are completed. Information will also be updated on a modular basis. Public comments will be solicited via an online comment form during the 60-day period following initial posting. Comments will be received and addressed before each module is posted in final form. The entire code will be open to revision every two years. For more information about the project or to access the modules, please visit http://www.cdc.gov/healthyswimming/MAHC/model_code.htm .

Volunteers Needed!

The MAHC process involves a Steering Committee guiding the work of many Technical Committees working on specific areas of the MAHC. Technical committees are still being formed to address future modules. If you are interested in joining a technical committee, please fill out the application packet at http://www.cdc.gov/healthyswimming/MAHC/pdf/MAHC_Tech_Comm_Nomination.pdf or contact MAHC@cdc.gov for additional information.

Publications and Presentations

1. Calanan RM, Hlavsa MC, Beach MJ, Rolfs RT. Communitywide cryptosporidiosis outbreak – Utah, 2007. MMWR, September 12, 2008.57(36); 989-993.
2. Yoder J, Hlavsa M, Craun GF, et al. Surveillance for waterborne disease and outbreaks associated with recreational water use and other aquatic facility –associated health events—United States, 2005-2006. In: Surveillance Summaries, September 12, 2008. MMWR; 57(No. SS-9): 1-38
3. Yoder J, Roberts V, Craun, GF, et al. Surveillance for waterborne disease and outbreaks associated with drinking water and water not intended for drinking—United States, 2005-2006. In: Surveillance Summaries, September 12, 2008. MMWR; 57(No. SS-9): 39-69.

Please submit citations for inclusion in the next newsletter by January 30, 2009.

When the Well Runs Dry—Drought and Public Health

While natural events such as floods and hurricanes raise concerns about the risks associated with a surplus of water or the challenges of restoring access to available water supplies, increasing attention is being given to the potential health impacts of drought on human health—particularly in relation to climate change. The National Center for Environmental Health (NCEH) co-sponsored an expert stakeholder workshop with the American Water Works Association (AWWA) and the Environmental Protection Agency (EPA) in Atlanta during September, 2008. Experts from state and local health departments, emergency management associations, academia, national public health associations, agricultural departments, water utility companies, drought centers, and many units of CDC and other federal agencies, including the U.S. Army, EPA, and National Oceanic and Atmospheric Administration met to discuss issues such as access to safe water in a drought event, prevention and management of likely water-, food-, and vector-borne illness, and the needs of vulnerable populations. The goal was to define the key public health issues related to drought and the role of state and local public health officials in addressing them.

The meeting was professionally facilitated and made innovative use of technology to foster productive collaboration – each participant had a laptop that enabled anonymous and simultaneous interaction on discussion boards. A prominent recommendation from the workshop was to ensure state and local public health officials have the tools they need to effectively engage on this issue. Local public health officials need to be involved to ensure that their communities are protected from likely drought-associated health threats. The workgroup will establish a guidance report with information and tips for state and local health officials on key health issues related to drought and how to get a seat at the table as this issue is addressed in their community. Questions or comments for NCEH about this project may be directed to Captain Mark Miller at MDMiller@cdc.gov and Martin Kalis at MKalis@cdc.gov.

Figure 8 Stakeholders participated from multiple sectors.

Contacts

CDC is available to provide assistance regarding waterborne outbreaks and illnesses. Please contact us to report an outbreak or to request information about waterborne illnesses related to drinking water, recreational water and other water uses. State Health Departments can also contact CDC to obtain epidemic and laboratory assistance for waterborne outbreak investigations. Additional resources are available for recreational water inquiries and outbreaks involving *Legionella*.

Telephone 770.488.7775 (staffed Monday-Friday)
Fax 770.488.7761
Email parasites@cdc.gov
Mail Waterborne Disease and Outbreak Surveillance Coordinator,
Division of Parasitic Diseases, NCZVED, CDC, MS F-22
4770 Buford Highway, NE, Atlanta, GA, 30341-3724

CDC Reporting Form (CDC 52.12, rev 01/2003):
http://www.cdc.gov/healthyswimming/downloads/cdc_5212_waterborne.pdf
Preview the NORS Reporting Form (CDC 52.12, rev 03/2008):
http://www.cdc.gov/healthyswimming/rwi_outbreak.htm
Recreational Water- Online Resources:
http://www.cdc.gov/healthyswimming
RWI Outbreak Response Toolkit:
http://www.cdc.gov/healthyswimming/rwi_outbreak.htm

Legionella:

[Editor's note: contact info edited, 06/2009]

All travel-associated Legionnaires' disease cases should be reported directly to the *Legionella* team by emailing travellegionella@cdc.gov or by sending a completed Legionellosis case report form within the seven days following state notification to CDC 1600 Clifton Road MS C-23 Atlanta, GA 30333, Attn: *Legionella* Team. **All legionellosis cases and outbreaks that are not associated with travel** may be reported by sending completed case report forms to the above address within one month of state notification or as soon as possible thereafter. Case report forms and *Legionella* information can be found at http://www.cdc.gov/legionella. **Contact for additional questions, including assistance with outbreak investigations**: travellegionella@cdc.gov, 1-800-CDC-INFO (1-800-232-4636).

Please also submit the CDC 52.12 form and/or a summary report (see contact information at left) when the legionellosis outbreak investigation has been completed.

Please contact Virginia Roberts at evl1@cdc.gov to submit content or suggestions for *A Drop of News*.